## **Background Paper**

15 Aug 00

## Joint C4ISR Outcome based Integrated Architecture Assessment (JCOBIAA) Joint Test and Evaluation Joint Feasibility Study (JFS)

**Purpose:** Provide Command, Control, Communication, Computers, and Intelligence, Surveillance, and Reconnaissance (C4ISR) Integrated Architectures Assessment capability for Joint Task Force Commanders.

**Problem:** Today's military operations are conducted within a Joint Task Force (JTF) consisting of elements of the four Armed Services. The Commander of this Joint Task Force (CJTF) must integrate disparate organizations and their underlying infrastructures to form a cohesive organization. The JTF staff designs an integrated architecture consisting of three views: operational, systems and technical, to manage the complexity of the operation. The CJTF does not have adequate procedures to assess the architecture performance as part of the architecture building and execution process prior to deployment. There is no efficient, test-verified procedure to surface deficiencies and identify solutions in the JTF's C4ISR architecture within the CJTF's resource-constrained environment.

**Solution:** JCOBIAA will test a multi-step process to assess integrated architectures. The first step is to use a risk assessment tool to identify and prioritize potential problem areas and subsequent steps will focus on detailed modeling and test activities on areas of the architecture where improvements will provide the highest benefits.

**Status:** In July 2000, OSD directed JCOBIAA to conduct a JFS that concludes in July 2001. The JFS purpose is to determine the necessity and feasibility of a follow-on Joint Test. The JFS is starting with refinement of the problem statement and description of high-level test issues to be addressed. Current tools and procedures to provide the enhanced architecture assessment process will be analyzed, assessed and recommended. A potential Joint Test will be defined, including rigorous test and analysis procedures and resource requirements. Questions concerning the Joint Test will be answered as to who will be involved, the schedule and location for the test events, and how the test will be executed.

## Current activities:

- Investigate, evaluate, and demonstrate potential tools.
- Determine customer product focus and priority.
- Identify potential enhancements to current procedures.
- Develop a joint test methodology and analysis procedures, scope the joint test and produce a feasibility study report.
- Prepare for the first of three Technical Advisory Boards (Service test and evaluation technical advisors, OSD organizations, and others) reviews in September 2000.

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